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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,135	03/01/2002	Kunihiko Hori	020235	2700

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EXAMINER	
THANH, QUANG D	

ART UNIT	PAPER NUMBER
3764	6

DATE MAILED: 07/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

NK

Office Action Summary	Application No.	Applicant(s)	
	10/085,135	HORI ET AL.	
	Examiner	Art Unit	
	Quang D. Thanh	3764	

-- The MAILING DATE of this communication appears on the cov r sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 March 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☒ Claim(s) *9,11 and 13* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 07/15/2002 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because there is no English translation of the foreign documents. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 ¶ C(1).

Claim Objections

2. Claims 9,11 and 13 are objected to as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 9, 11, 13 recite the limitation "or to produce a series of items...when **otherwise.**" is unclear. This limitation is indefinite because what is otherwise? There could be many things happening. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 9, as best understood, is rejected under 35 U.S.C. 102(b) as being anticipated by Mrklas et al. (5,304,112). Mrklas discloses a physiological quantity measuring circuit comprising: physiological quantity detection circuit 23 having sensor (included in structure 15 as disclosed in col. 14, lines 13-31) to receive physiological quantity signal, a signal processing circuit 25 to produce physiological quantity data based on detection signal (fig. 1B), the detection circuit having a plurality of signal converters (amplifying and signal generating circuitry) for receiving input signal from each sensor and deliver output signal as detection signal (col. 14, lines 37-42), the signal converters having different signal conversion characteristics (to provide different stress state data) which are different in the relationship of output/input signal, the signal conversion characteristics overlapping each other in the range of input signals (from different sensors as disclosed in col. 14, lines 37-42) , the signal processing circuit operable to produce a series of physiological quantity data based on detection/output signals resulting from one of the different kinds of signal conversion characteristics, when the resulting detection signals are all included within an effective output range of said one kind of signal conversion characteristics.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-5 are rejected under 35 U.S.C. 103(b) as being 35 U.S.C. 103(a) as being unpatentable over by Ulrich (6,024,575) in view of Fujii (6,117,094). Re claim 1, Ulrich discloses a massage device (figs. 1-2A) for giving massage by therapeutic members 20, the device comprising: a living body information sensor 12, means for judging (diagnostic circuit 16) the psychological state (stress state) based on the living body information detected. Ulrich although teaches converter 14 as a means for holding inputs signals and converting to output signals and a microprocessor as a control unit (col. 3, lines 30-55) , it does not explicitly disclose means for holding histories of psychological state of a person to be massaged. However, Fujii teaches a massaging apparatus comprising a control unit that has a storage part for storing data of massage effective spots as specified position data such that the massaging unit can be positioned and operated by the control unit based on this position data (see abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify the Ulrich's device, to include means for holding histories of psychological state of a person to be massaged (this can take form of a storage memory in the microprocessor), as suggested by Fujii, for the purpose of

providing a storage memory holding histories of psychological state that enables the control unit to process and operate the massager members accordingly based on this specific data. Re claims 2-5, the living body information sensor includes more than one type of sensors: galvanic skin response (GRS), pulse and skin temperature; the psychological state judging means provides indication of stress level by fluctuation (low level inherently indicating relaxed state and vice versa) of GRS, pulse (heart rate), or skin temperature (col. 4, lines 36-42).

6. Claims 1-4, and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Mrklas et al. (5,304,112) in view of Fujii (6,117,094)

7. Re claim 1, Mrklas discloses a massage device for giving massage by therapeutic members 9 (fig. 1B), the device comprising: a living body information sensor (col. 14, line 15), means for judging 17 the psychological state (stress state indicator 17) based on the living body information detected. Mrklas although teaches interface 24 as a means for holding inputs signals and converting to output signals and a computer as a control unit (fig. 1B, col. 14, lines 25-52), it does not explicitly disclose means for holding histories of psychological state of a person to be massaged. However, Fujii teaches a massaging apparatus comprising a control unit that has a storage part for storing data of massage effective spots as specified position data such that the massaging unit can be positioned and operated by the control unit based on this position data (see abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the

time of invention was made to modify the Mrklas's device, to include means for holding histories of psychological state of a person to be massaged (this can take form of a storage memory in the computer), as suggested by Fujii, for the purpose of providing a storage memory holding histories of psychological state that enables the control unit to process and operate the massager members accordingly based on this specific data.

8. Re claims 2-4 and 6, the living body information sensor includes more than one type of sensors: galvanic skin response/resistance (GRS), or pulse rate (heart rate); the psychological state judging means provides indication of stress level by fluctuation of GRS, pulse (heart rate) with higher heart rate associated with higher level of stress and vice versa (col. 14, lines 13-31).

9. Re claims 7-8, Mrklas/Fujii discloses the claimed invention including means for displaying (fig. 2, screen 51) stress indicator pattern, except for counting means to provide a frequency of tense state of the user when being massaged at different body parts. However, Mrklas teaches a stress state detection module 15 that provides physiological inputs to a SRS computer 24, and thus obviously capable of counting and storing the frequency of stress state (tense) such that the computer 24 would process and input the count frequency to the main control computer 25 (fig. 1B) and the count could be easily displaced on the monitor screen of the main computer or screen 51 (fig. 2).

10. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mrklas in view of Ulrich. Mrklas discloses the claimed invention including sensor for breathing rate, heart rate, and skin resistance, except for skin temperature sensor. However, Ulrich teaches that, in additional to regular physiological sensors, a thermistor may be used for monitoring changes in the skin temperature as the indicator of stress level (col. 4, lines 37-39). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to substitute the skin resistance sensor with thermistor, as suggested by Ulrich, since both are well known in the art as equivalent means for monitoring physiological information as the indicator of stress level. With respect to low and high temperature signals, it would have been obvious to one having ordinary skill in the art at the time the invention was made to set up optimum high and low value any physiological information such as skin temperature associated with tense and relaxed stress levels respectively, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

11. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mrklas in view of Besson et al. (5,957,854). Mrklas discloses the claimed invention including sensor for breathing rate, heart rate, and skin resistance, except for perspiration sensor. However, Besson teaches a medical device having electrodes as sensor for monitoring changes in the temperature, perspiration, etc. (see abstract)., Therefor, it would have been obvious to one of ordinary skill in the art at the time of

invention was made to substitute the other sensor with electrode-sensors for monitoring changes in perspiration, as suggested by Besson, since both are well known in the art as equivalent means for monitoring physiological information as the indicator of stress level. With respect to low and high gain signals, it would have been obvious to one having ordinary skill in the art at the time the invention was made to set up optimum high and low value any physiological information such as perspiration associated with tense and relaxed stress levels respectively, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claims 1-6 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 10-16 of copending Application No. 09/665,801. This is a provisional obviousness-type double

patenting rejection because the conflicting claims have not in fact been patented. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application are broader and are met by the narrower copending claims. In the instant, claims 10-16 of copending Application No. 09/665,801 discloses all the elements that are recited in claims 1-6 of the present application, including means for holding histories of psychological state (memory means in claim 11 of copending Application No. 09/665,801).

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Inbe et al. discloses a relax inducing device with heartbeat detection unit. Kitadou et al. discloses a relaxation apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang D. Thanh whose telephone number is (703) 605-4354. The examiner can normally be reached on Monday-Thursday & alternate Friday. .

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Lucchesi can be reached on (703) 308-2698. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1148.

Quang D. Thanh
Patent Examiner
Art Unit 3764

QT

Danton D. DeMille
Primary Examiner

June 19, 2003